

CLAIMS.

1. A non-invasive patient immobilisation assembly for immobilising a body part of a patient and for at least temporarily fixing the position thereof, the immobilisation assembly comprising a rigid template (1) made of a thermoplastic material, the template being thermoformed or otherwise moulded to conform to the body part to be immobilised, the immobilisation assembly also comprising a fixation plate (3, 12, 13) and connecting means (10, 11, 14, 15, 16) for connecting the template (1) to the fixation plate (3, 12, 13) in view of fixing the position of the template with respect to the fixation plate, the template being provided to at least partly cover the body part to be immobilised, characterised in that the template (1) is provided to exert a fixation force of a preset value to the body part to be immobilised by exerting a pulling force pulling the body part towards the fixation plate (3, 12, 13) with the aim of restraining the movability of the body part within the template within defined limits, the assembly further comprising means (5, 6, 7, 17, 18) for adjusting the fixation force exerted by the template to the preset value.

2. An assembly as claimed in claim 1, characterised in that the fixation force exerted by the template is about 75-200 N, preferably 100-150 N.

3. An assembly as claimed in claim 1 or 2, characterised in that the means for adjusting the fixation force are adjustable in a continuous or discontinuous manner.

4. An assembly as claimed in any one of claims 1-3, characterised in that the means for adjusting the fixation force are adapted to provide for a stepwise adjustment of the fixation force.

5. An assembly as claimed in any one of claims 1-4, characterised in that the template (1) comprises at least one edge (14), in that the connecting means (10) connecting the template (1) to the fixation plate (3, 12, 13) are connected to the at least one edge (14, 15, 16) and in that the pulling force is exerted to the at least one edge of the template.

6. An assembly as claimed in any one of claims 1-5, characterised in that the means (5, 6, 7, 17, 18) for adjusting the pulling force exerted by the template (1) comprise means for varying the distance between the template and the body part to be immobilised.

7. An assembly as claimed in any one of claims 1 -6, characterised in that the means (5, 6, 7, 17, 18) for adjusting the pulling force comprise means for displacing the template (1) with respect to the body part, in view of varying the distance of the template with respect to the body part to be immobilised.

8. An assembly as claimed in any one of claims 1- 7, characterised in that the fixation plate (3, 12, 13) comprises a top surface (12) and bottom surface (13), in that the template is connected to the top surface (12) and in that means (6, 7) are provided for moving the top surface with respect to the bottom surface.

9. An assembly as claimed in any one of claims 1 - 8, characterised in that the fixation plate (3, 12, 13) comprises a top surface (12) and bottom surface (13), in that the template is connected to the bottom surface (13) and in that means (6, 7) are provided for moving the bottom surface (13) with respect to the top surface (12).

10. An assembly as claimed in any one of claims 1 - 9, characterised in that the assembly comprises a support (2), the support being provided for positioning on top of the fixation plate (3, 12, 13) in view of supporting the body part to be immobilised, and in that the means for adjusting the fixation force comprise means for varying the position of the support (2) with respect to the template (1).

11. An assembly as claimed in any one of claims 1 - 9, characterised in that the assembly comprises a support (2) for supporting the body part to be treated, the support (2) being positioned independently of the fixation plate (3), and in that the means for adjusting the fixation force comprise means for varying the position of the support (2) with respect to the template (1) and/or the fixation plate (3).

12. An assembly as claimed in any one of claims 1- 10, characterised in that the template (1) is provided to immobilise the head of the patient.

13. An assembly as claimed in claim 12, characterised in that the device comprises a head and neck support (2) for supporting the head and neck of a patient.